

## VOMBISIDRIS BOLTON (HYMENOPTERA, FORMICIDAE), A NEW RECORD GENUS IN CHINA, WITH DESCRIPTION OF A NEW SPECIES

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**Abstract** The ant genus *Vombisidris* Bolton is recorded in China for the first time. A new species of the genus, *V. umbrabdomina* sp. nov., is described. The new species is close to *V. nahet* Bolton but differs in sides of mesonotum slightly convex, not obtusely angular in dorsal view, antennal scape longer, colour yellowish brown, gaster dark brown, darker than head and alitrunk.

**Key words** Hymenoptera, Formicidae, *Vombisidris*, new record genus, new species.

The ant genus *Vombisidris*, described by Bolton in 1991, is a small genus in the subfamily Myrmicinae, containing only 13 species in the world (Bolton, 1991; Zacharias, 2004). Among the 13 known species, 2 are distributed in Papua New Guinea, 3 in East Malaysia, 3 in Indonesia, 2 in Australia, 2 in India, and 1 in Bruner. This genus is predominantly arboreal and ranges from India to Queensland, with the majority of species in Malaysia and Indonesia. A new species of the genus is described in this paper. The type specimen is deposited in the Insect Collection, Guangxi Normal University, Guilin, China.

The measurements and indices used in this paper are as defined in Bolton (1983): head length (HL), head width (HW), cephalic index (CI), scape length (SL), scape index (SI), pronotal width (PW), alitrunk length (AL), eye diameter (ED).

All the measurements are expressed in mm.

### *Vombisidris* Bolton New record to China

*Vombisidris* Bolton, 1991. *Syst. Entomol.* 16: 1. Type species: *V. philax* Bolton, 1991. Indonesia.

**Diagnosis.** Palp formula 5, 3. Mandibles short triangular, the masticatory margin with 5 teeth, uniquely arranged. The large apical tooth followed by two smaller teeth (third smaller than second), then a long diastema and two small basal teeth. Length of diastema is at least equal to length of margin occupied by the apical group of three teeth. Anterior clypeal margin lacking an isolated median seta, instead with a pair of setae that straddle the midpoint. Frontal lobes narrow. Torulus concealed by frontal lobes in full face view. Frontal carinae and antennal scrobes absent.

Eyes at or slightly in front of the midlength of the sides of the head. Antennae 12-segmented with a strongly defined 3-segmented club. Sides of head usually with a strong sinuate subocular groove. Alitrunk elongate and low in profile, promesonotum not domed-convex; propodeum bispinose, propodeal spiracle high on side, at about midlength of sclerite, distinctly separated from the small metapleural gland bulla. Metapleural lobes small and rounded. Petiole pedunculate. Postpetiolar sternite reduced, small in profile (Bolton, 1991).

*Vombisidris umbrabdomina* sp. nov. (Figs. 1–2)

**Holotype worker.** TL 4.2, HL 0.82, HW 0.72, CI 87, SL 0.60, SI 83, PW 0.50, AL 1.25, ED 0.20 ( $0.28 \times \text{HW}$ ) and with 10 ommatidia in the longest row. Head longer than broad, sides feebly convex, median occipital margin weakly convex, occipital corners rounded. Mandibles and their teeth are as in diagnosis of the genus. Eyes moderate large, situated slightly in front of the midlength of the sides of the head. Faint vestiges of frontal carinae present, extending back from the posterior extremities of the frontal lobes to beyond the level of the posterior margins of the eyes. Subocular groove complete, running from the mandibular insertion to the anteroventral margin of the eye, then passing through a shallow angle and continuing along the sides to the lateroccipital margin, where the subocular groove ends slightly concave. Antennal scape relatively long (SI 83). Eyes relatively large ( $0.28 \times \text{HW}$ ) with 10 ommatidia in the longest row. Alitrunk elongate and low in profile, mesonotum unarmed. In dorsal view,

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sides of mesonotum slightly convex; metanotal groove shallow but distinct. In profile, propodeal spines long and slightly curved down at tip, about 1.3 times as long as the distance between their bases. Legs relatively long, maximum length of hind femur (0.72 mm) as long as head width.

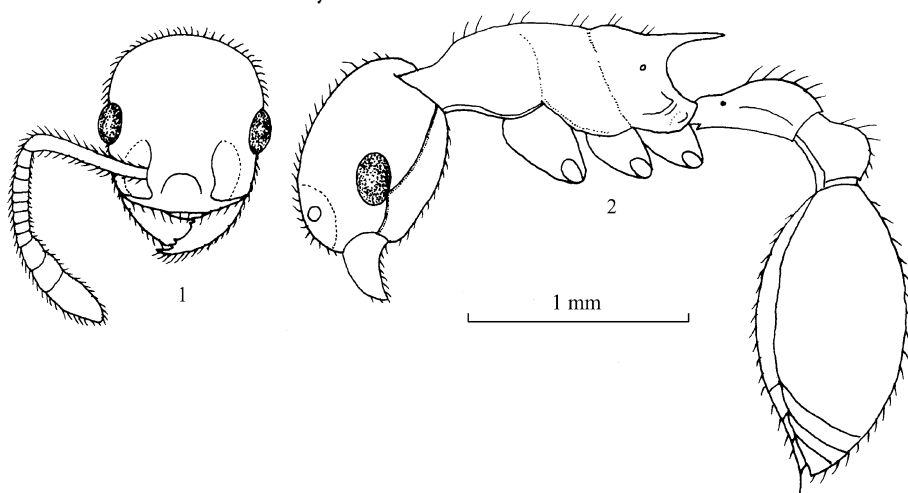
In dorsal view, petiolar node distinctly longer than wide and sides of the node almost straight, dorsal face of the node moderately convex, petiolar spiracle at the midlength of the peduncle, dorsal face of postpetiolar node roundly convex. First gastral tergite smooth, except for a band of short basigastral costulae feebly present immediately behind the post petiole, the spaces between the basigastral costulae smooth. Head, alitrunk, petiole and postpetiole reticulate-rugose. Propodeal declivity with 3 fine transverse rugulae between the spines and remaining portion smooth and shining. Gaster smooth. Erect or suberect hairs densely present on dorsal surface head and whole body. Colour

yellowish-brown, gaster dark brown, darker than head and alitrunk.

Holotype Worker, Zhangjiajie National Natural Reserve, Hunan Province (29°10' N, 110°25' E), 13 Aug. 2004, collected from shrubbery with insect net by HUANG Jian Hua.

This new species is similar to *V. nahet* Bolton, but differs in sides of mesonotum slightly convex, not obtusely angular in dorsal view, antennal scape relatively longer, colour yellowish-brown, gaster dark brown, darker than the head and alitrunk.

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Figs. 1-2. *Vombisidris umbrabdomina* sp. nov. worker. 1. Head in full face view. 2. Body in profile view.

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## 中国新纪录属犁沟蚁属 (膜翅目, 蚁科) 及一新种记述

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**摘要** 记述中国新纪录属犁沟蚁属 *Vombisidris* Bolton 及 1 新种暗腹犁沟蚁 *V. umbrabdomina* sp. nov.。新种与 *V. nahet* Bolton 相似, 但中胸背板背面观两侧轻度隆起, 不呈

钝角状, 触角柄节较长, 体黄褐色, 后腹部深褐色, 深于头和并腹胸。模式标本保存于广西师范大学昆虫标本室。

**关键词** 膜翅目, 蚁科, 犁沟蚁属, 新纪录属, 新种.

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